

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A chip removing device in a band saw that removes, using a pair of ~~brushed~~ brushes, chips adhered to a band saw blade that rotates while being wound around a driving wheel and a follower wheel rotatably supported by a saw blade housing, the chip removing device comprising:

a pair of brush support bodies that pivotally support a pair of brush shafts having respectively the pair of brushes that can come into contact with both side surfaces of a blade tip of the band saw blade such that the pair of brush shafts can be rotationally driven;

a driving mechanism having a drive motor, the driving mechanism ~~that~~ rotationally ~~drives~~ driving the pair of brush shafts pivotally supported by the pair of brush support bodies in a manner such that a rotationally moving direction on a side where each of the pair of brushes provided on the pair of the brush shafts comes into contact with the band saw blade is the same direction of the running direction of the band saw blade; and

a removing biasing unit that can bias the pair of brush support bodies in a direction approaching the band saw blade and in a direction separating away from the band saw blade, wherein

each of the pair of brush support bodies and each of the pair of brush shafts are provided such that they can rock in the direction approaching the band saw blade and in the direction separating away from the band saw blade,

each of the pair of brushes is biased toward the band saw blade so that the band saw blade is sandwiched with the pair of brushes,

the pair of brush shafts are inclined in a forward and downward direction with respect to a running direction of the band saw blade, and

each of the pair of brushes is rotated from a blade root side toward a blade tip side of the band saw blade, thereby removing the chips from the band saw blade.

2. (Original) The chip removing device in the band saw according to claim 1, further comprising a wear detector that detects a reduction in diameter of the brush caused by wear as a variation of the brush support body in a direction approaching the band saw blade.

3. (Original) The chip removing device in the band saw according to claim 2, wherein the wear detector comprises:  
pushing levers extending from the pair of brush support bodies toward the band saw blade;  
shafts to be detected that are engaged with the pushing levers and that can reciprocate in parallel to the brush shaft; and  
a detecting biasing unit that always brings the to-be detected shafts into abutment against the pushing levers,  
wherein the wear detector detects movement of one or both of the to-be detected shafts and detects wear of the brush.

4. Canceled

5. (Currently Amended) The chip removing device in the band saw according to claim 3, wherein

the driving mechanism comprises:

a pair of drive bevel gears opposed to a shaft end of a main rotation drive shaft that is rotated and driven by [[a]] the drive motor;

a pair of second rotation drive shafts that are rotated and driven in directions opposite from each other through a pair of follower bevel gears meshing with the pair of drive bevel gears, the pair of second rotation drive shafts intersecting with the main rotation drive shaft at right angles; and

a pair of universal joints that connects the pair of second rotation drive shafts and the pair of brush shafts that are pivotally supported by the pair of brush support bodies such that the pair of second rotation drive shafts and the pair of brush shafts can rock in a direction approaching the band saw blade and in a direction separating away from the band saw blade.

6. (Previously Presented) The chip removing device in the band saw according to claim 5, wherein

the removing biasing unit comprises:

spring hooks that are respectively provided on the brush support bodies and a housing incorporating the main rotation drive shafts and the second rotation drive shaft on the side of the band saw blade, and at positions away from a turning center of a respective universal joint; and

tension springs that are resiliently provided between the spring hook on the side of the housing and the spring hook on the side of the brush support body.